1. Multi Leaner Regression:

r\_score=0.93586

1. Support vector Machine:

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| --- | --- | --- | --- | --- | --- |
| Sl.No | Hyper Parameter | Linear | RBF(Non Linear Value) | Poly | SigMoid |
| 1 | Default(C=1.0) | 0.8950 | -0.0573 | -0.0508 | -0.0574 |
| 2 | C=0.1 | 0.9375 | -0.0574 | -0.0568 | -0.05748 |
| 3. | C=10.0 | -2.4372 | -0.0558 | 0.02531 | -0.05761 |
| 4. | C=100.0 | -357.0795 | -0.03023 | 0.46566 | -0.05878 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

3.Decision Tree:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl.No | Criterion | Max Features | Splitter | R.Value |
| 1. | squared\_error | None | best | 0.93612 |
| 2. | squared\_error | sqrt | best | 0.7042 |
| 3. | squared\_error | log2 | best | 0.8386 |
| 4. | friedman\_mse | Default(None) | best | 0.9085 |
| 5. | friedman\_mse | sqrt | best | 0.71789 |
| 6. | friedman\_mse | log2 | Best | 0.5092 |
| 7. | absolute\_error | Default(None) | best | 0.94811 |
| 8. | absolute\_error | sqrt | best | 0.7596 |
| 9. | absolute\_error | Log2 | Best | 0.4601 |
| 10. | squared\_error | None | random | 0.89741 |
| 11. | squared\_error | sqrt | random | 0.86152 |
| 12. | squared\_error | log2 | random | -0.3241 |
| 13. | friedman\_mse | Default(None) | random | 0.61411 |
| 14. | friedman\_mse | sqrt | random | 0.379021 |
| 15. | friedman\_mse | log2 | random | -0.05592 |
| 16. | absolute\_error | Default(None) | random | 0.86266 |
| 17. | absolute\_error | sqrt | random | 0.77824362 |
| 18. | absolute\_error | Log2 | random | 0.24388 |
| 19. | poisson | None | random | 0.78891 |
| 20. | poisson | sqrt | random | 0.6214 |
| 21. | poisson | Log2 | random | 0.36508 |